

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 17

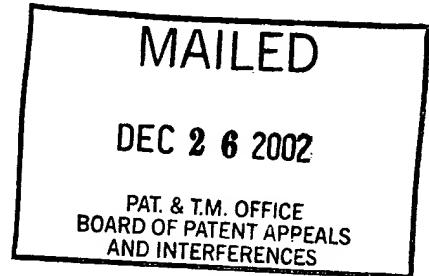
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BRIAN J. ROSELLE, THOMAS E. WARD
and DAVID K. ROLLINS

Appeal No. 2003-0234
Application No. 09/446,202

ON BRIEF



Before OWENS, PAWLIKOWSKI, and POTEATE, Administrative Patent Judges.

OWENS, Administrative Patent Judge.

DECISION ON APPEAL

This appeal is from the final rejection of claims 1-21, which are all of the claims in the application.

THE INVENTION

The appellants claim a composition which is useful for treating food to reduce the level of microorganisms on the surface thereof, and claim a method for treating food using the composition. Claim 1, directed toward the method, is illustrative:

1. A method for treating food to reduce the level of microorganisms on the surface of said food and make it safe to eat, said method comprising treatment occurring just prior to consumption, comprising the step of contacting the surface of said food with an aqueous dilute treatment composition comprising toxicologically-acceptable basic buffer to provide a pH of greater than about 10.5 and, optionally, toxicologically-acceptable detergent surfactant, for a period of time in excess of about one half of a minute, the composition being essentially free of any material that adversely affects safety or palatability, so that said food does not need to be rinsed before consumption.

THE REFERENCES

Murch et al. (Murch '295)	5,498,295	Mar. 12, 1996
Murch et al. (Murch '678)	5,849,678	Dec. 15, 1998

THE REJECTIONS

The claims stand rejected under 35 U.S.C. § 103 as follows:
claims 1-13 and 15-21 over Murch '295, and claim 14 over
Murch '295 in view of Murch '678.¹

OPINION

We affirm the aforementioned rejections. Because the examiner does not rely upon Murch '678 in the final rejection, we denominate the affirmance of the rejection of claim 14 as involving a new ground of rejection. Under the provisions of

¹ In the event of further prosecution, the examiner and the appellants should address whether there is adequate antecedent basis for "said base-stable anionic surfactant" in claim 14.

37 CFR § 1.196(b) we enter a new ground of rejection of all of the claims.

The appellants state that claims 1 and 7 stand or fall together, as do claims 12, 13, 15-19 and 21, and that each of claims 2-6, 8-11, 14 and 20 stands or falls separately (brief, page 3). The appellants, however, do not separately argue claims 3 and 9. These claims therefore stand or fall with the claim from which they depend, i.e., respectively, claims 2 and 8. We limit our discussion of the claims in the first two groups to one claim in each group, i.e., claims 1 and 12, and we discuss claims 2, 4-6, 8, 10, 11, 14 and 20 to the extent justified by the appellants' arguments. See *In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7)(1997).

Claim 1

Murch '295 discloses a method for removing dirt and other unwanted residues from produce intended for ingestion by humans or lower animals (col. 1, lines 9-14). The teaching that the composition with which the produce is contacted does not need a preservative to prevent the growth of fungi, bacteria, or the like (col. 9, lines 44-56) indicates that the composition reduces the level of microorganisms on the produce surface. The teaching

that the method is carried out by individual consumers (col. 6, lines 27-32) indicates that the uses of the method include treatment of produce just prior to consumption. The surface of the produce is contacted with an aqueous dilute treatment composition which can comprise a toxicologically-acceptable basic buffer to provide a pH which is preferably about 11.5 and preferably is not greater than about 12.5 (col. 4, lines 63-64; col. 5, lines 28-49; col. 6, lines 62-67; col. 9, lines 35-38). The disclosure that light scrubbing may be required (col. 12, lines 4-5 and 31), and a disclosure regarding the produce being not completely rinsed (col. 4, lines 17-22), indicate that the composition can remain in contact with the produce for a length of time required to scrub the produce, and also from the time the composition is applied to the produce until the produce is consumed. These times reasonably appear to include times of at least about have a minute. Also, the teaching that the typical use of the method involves treating individual items of produce which would make preparation of a bath of the composition wasteful (col. 11, lines 1-3) would have fairly suggested, to one of ordinary skill in the art, using a bath when multiple items are to be treated. It reasonably appears that the contact times of the composition with the produce, from the time the produce is

placed into the bath until the composition is rinsed off of the produce or the produce is consumed, would include times of at least about half a minute. The teaching that the components of the composition are toxicologically acceptable, i.e., "any residues from the ingredients of the compositions which may remain on the fruits or vegetables cleansed therewith are safe for ingestion by humans and lower animals" (col. 6, lines 64-67), indicates that the produce does not need to be rinsed before consumption.

The appellants argue that Murch '295 does not disclose or suggest either a contact time of at least half a minute or a relation between time and disinfectancy (brief, page 4). For the reasons given above, Murch '295 would have fairly suggested, to one of ordinary skill in the art, a contact time of at least about half a minute. For a *prima facie* case of obviousness to be established, it is not necessary for Murch '295 to have suggested to one of ordinary skill in the art a contact time of at least about half a minute for the purpose of solving the problem solved by the appellants. See *In re Kemps*, 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996); *In re Beattie*, 974 F.2d 1309, 1312, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992); *In re Dillon*, 919

F.2d 688, 693, 16 USPQ2d 1897, 1901 (Fed. Cir. 1990) (*en banc*),
cert. denied, 500 U.S. 904 (1991).

Claims 2 and 8

The appellants argue that Murch '295 does not disclose or suggest dilute treatment solutions comprising low levels of anionic surfactant (brief, page 5). The appellants' claims 2 and 8 require less than about 0.5 wt% of toxicologically-acceptable base-stable anionic detergent surfactant. The composition of Murch '295 can contain a toxicologically-acceptable base-stable anionic detergent surfactant, the disclosed amount being typically up to 0.2 wt% (col. 8, lines 48-52; col. 6, lines 62-67).

Claims 4-6, 10 and 11

The appellants argue that Murch '295 does not disclose or suggest a composition comprising less than about 0.1% of toxicologically-acceptable base-stable sodium and/or potassium alkyl sulfate and/or C₈₋₁₄ soap to reduce the viscosity of the solution to less than about 10 cp (claims 4 and 10) or less than about 5 cp (claims 5, 6 and 11) (brief, page 5). Murch '295 discloses that the composition can contain about 0.01 to about 15 wt% C₈₋₁₈ fatty acid soap (col. 2, lines 63-65; col. 7, lines 21-61) and that the levels and identities of the

ingredients are adjusted to provide products having the desired viscosities (col. 9, lines 22-23). The exemplified viscosity range begins at about 5 (col. 9, line 24). Because this is an exemplified range, this disclosure would have fairly suggested, to one of ordinary skill in the art, that viscosities slightly below this range would be suitable.

Claim 12

The appellants argue that Murch '295 does not disclose or suggest compositions containing orthophosphate (brief, page 5). The appellants' claim 12, however, does not require the presence of orthophosphate. The claim merely requires that when orthophosphate is present, it is present in an amount from about 3 to about 60 wt% of phosphoric acid equivalent.

Claim 14

The appellants argue that Murch '295 does not disclose or suggest compositions comprising calcium ion sequestrant which is sodium and/or potassium tripolyphosphate and/or ethylenediamine-tetraacetate (brief, page 5). The teaching in Murch '295 that the composition can contain an organic polycarboxylic acid or salt thereof as a sequestrant/builder (col. 8, lines 57-63) would have led one of ordinary skill in the art to use polycarboxylic acid salts which were known to be suitable as a sequestrant/

builder in the type of composition disclosed by Murch '295. Two such polycarboxylic acid salts are sodium ethylenediaminetetraacetate and potassium ethylenediaminetetraacetate as disclosed by Murch '678 (col. 8, lines 56-59).

Claim 20

The appellants argue that Murch '295 does not disclose or suggest a composition comprising a toxicologically-acceptable suds suppressor (brief, page 5). The teaching in Murch '295 that it is desirable that the composition is low sudsing (col. 2, lines 42-43) would have fairly suggested, to one of ordinary skill in the art, including in the composition a conventional suds suppressor such as a toxicologically-acceptable silicone which, as indicated by the appellants (specification, page 10), was commercially available.

Conclusion

For the above reasons we conclude that the inventions claimed in the appellants' claims 1-21 would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

New ground of rejection

Claims 1-21 are rejected under 35 U.S.C. § 103 as being unpatentable over Murch '678.

Claim 1: Murch '678 discloses a method for treating food by an individual consumer, i.e., just prior to consumption, to reduce the level of microorganisms on the surface of the food and thereby make the food safe to eat (col. 11, lines 25-29). The food is treated with an aqueous dilute treatment composition which 1) can contain a toxicologically acceptable basic buffer, 2) has a pH of 9.5 or greater, preferably more than about 11, and more preferably about 11.5 to about 12.5, and 3) preferably is essentially free of any material that is not toxicologically acceptable (col. 3, lines 4-7, 18-21 and 25-30).^{2,3} The treatment time for obtaining good kill of microorganisms is at least about 1 minute, preferably at least 5 minutes, and for some microorganisms, 10 minutes (col. 10, line 61 - col. 11, line 2). Murch '678 teaches that longer treatment times give better antimicrobial benefits, and at high concentrations and at pHs equal to or above 11.5, antibacterial efficacy is achieved quickly (col. 11, lines 2-7). Hence, Murch '678 would have

² "By 'toxicologically-acceptable' is meant that any residues from the ingredients of the compositions which may remain on the fruits or vegetables cleansed therewith are safe for ingestion by humans and/or lower animals" (col. 6, lines 59-61).

³ It reasonably appears that the composition which is essentially free of any material that is not toxicologically acceptable does not need to be rinsed before consumption.

fairly suggested, to one of ordinary skill in the art, use of a basic buffer to provide a pH greater than about 10.5.

Claims 2-4: Murch '678 teaches that the composition can contain typically up to 0.2 wt% of salts of dodecylbenzene sulfonate, which is a base stable anionic surfactant (col. 8, lines 48-52). The exemplified viscosity is as low as 2 cp (col. 9, lines 23-25). The buffer can be potassium carbonate or sodium bicarbonate to provide a pH of preferably not greater than about 12.5 (col. 9, lines 1-18 and 34-37). The aqueous carrier can be water or water/ethanol (col. 3, lines 18-21).

Claims 5 and 6: The composition includes about 0.01 to about 15 wt% of a C₈ to C₁₈ fatty acid soap (col. 2, line 60; col. 7, lines 14-41), and the exemplified viscosity is as low as 2 cp (col. 9, lines 23-25).

Claim 7: The composition can be a concentrate (col. 4, lines 10-13), even to the point of being a nonaqueous liquid or solid (col. 5, lines 10-11), which would have fairly suggested, to one of ordinary skill in the art, dilution by a large amount such that the concentrate is used in an amount such as about 0.1 to about 5% by weight of the dilute aqueous treatment composition.

Claims 8 and 9: Murch '678 teaches that the composition can contain typically up to 0.2 wt% of salts of dodecylbenzene sulfonate, a base stable anionic surfactant (col. 8, lines 48-52). The buffer can be potassium carbonate or sodium bicarbonate to provide a pH of preferably not greater than about 12.5 (col. 9, lines 1-18 and 34-37). The aqueous carrier can be water or water/ethanol (col. 3, lines 18-21). Hence, Murch '678 would have fairly suggested, to one of ordinary skill in the art, the compositions claimed in the appellants' claims 8 and 9.

Claims 10 and 11: The composition includes about 0.01 to about 15 wt% of a C₈ to C₁₈ soap (col. 2, line 60; col. 7, lines 14-41), and the exemplified viscosity is as low as 2 cp (col. 9, lines 23-25).

Claims 12 and 19: Murch '678 discloses a food-treating composition which can contain about 0.1 to about 4 wt% of a toxicologically acceptable nonionic surfactant (col. 2, lines 61-65), and can contain a buffer to provide a pH of no more than about 12.5 (col. 9, lines 1-37).⁴ The composition can be a concentrate (col. 4, lines 10-13), even to the point of being a non-aqueous liquid or solid (col. 5, lines 10-11), which would

⁴ The orthophosphate in element (b) need not be present.

have fairly suggested, to one of ordinary skill in the art, dilution by a large amount such that the concentrate is used in an amount such as about 0.1 to about 5% by weight of the dilute aqueous treatment composition. The components are all toxicologically acceptable, food grade components (col. 3, lines 28-30; col. 6, lines 56-61). Thus, Murch '678 would have fairly suggested, to one of ordinary skill in the art, the compositions claimed in the appellants' claims 12 and 19.

Claims 13 and 14: The composition can include about 0.1 wt% to about 15 wt% of C₈ to C₁₈ fatty acid soap (col. 2, line 60; col. 7, lines 14-41), and a sequestrant which can be sodium and/or potassium ethylenediaminetetraacetate⁵ and can be present in an amount of about 0.2 to about 4 wt% (col. 3, lines 44-49; col. 8, lines 56-60). The exemplified viscosity is as low as 2 cp (col. 9, lines 23-25). The buffer can be potassium carbonate or sodium bicarbonate to provide a pH of preferably not greater than about 12.5 (col. 9, lines 1-18 and 34-37).

Claims 15-17 and 21: One of ordinary skill in the art would have desired to use impure water in the Murch '678 composition

⁵ The appellants' sequestrants include sodium and/or potassium ethylenediaminetetraacetate (specification, page 8).

because of its lower cost compared to disinfected water.⁶ The teaching that the composition kills microorganisms (col. 10, line 61 - col. 11, line 32) would have indicated to one of ordinary skill in the art that water containing microorganisms which would be killed by the components added thereto would be suitable for use in the composition.

Claim 18: The composition can contain an antioxidant (col. 9, line 50 - col. 10, line 8). The antioxidants which Murch '678 considers to be advantageous, i.e., tocopherols such as vitamin E or tocopherol acetates in alkaline formulations (col. 9, lines 61-63), are the same as those which the appellants consider to be advantageous (specification, page 9). Hence, it reasonably appears that one of ordinary skill in the art, when determining the optimum amount of the Murch '678 antioxidant to use, would arrive at amounts including those recited in the appellants' claim 18, i.e., about 0.001 to about 0.05 wt%.

Claim 20: The teaching that a low sudsing liquid solution is desirable for cleaning fruits and vegetables so that removal of the solution is achieved quickly and easily (col. 1, lines 41-51) would have fairly suggested, to one of ordinary skill in the art,

⁶ The appellants define "impure water" as "water that is impure by reason of microorganisms being present" (specification, page 8, last two lines).

including in the cleaning composition a known food grade suds suppressor.⁷

DECISION

The rejections under 35 U.S.C. § 103 of claims 1-13 and 15-21 over Murch '295, and claim 14 over Murch '295 in view of Murch '678, are affirmed. Because Murch '678 was relied upon by the examiner in the examiner's answer but not in the final rejection, we denominate the affirmance of the rejection of claim 14 as involving a new ground of rejection. A new ground of rejection of all of the claims has been entered under 37 CFR § 1.196(b).

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b), by final rule notice, 62 Fed. Reg. 53, 131, 53, 197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63, 122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Regarding any affirmed rejection, 37 CFR § 1.197(b) provides:

⁷ As indicated by the appellants' specification (page 10), such suds suppressors were commercially available.

(b) Appellants may file a single request for rehearing within two months from the date of the original decision ...

37 CFR § 1.196(b) also provides that the appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197(c)) as to the rejected claims:

(1) Submit an appropriate amendment of the claims so rejected or a showing of facts relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the application will be remanded to the examiner....

(2) Request that the application be reheard under § 1.197(b) by the Board of Patent Appeals and Interferences upon the same record....

Should the appellants elect to prosecute further before the Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If the appellants elect prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of

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Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED, 37 CFR § 1.196(b)

Terry J. Owens
TERRY J. OWENS)
Administrative Patent Judge)
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Beverly A Pawlikowski
BEVERLY A. PAWLIKOWSKI) BOARD OF PATENT
Administrative Patent Judge) APPEALS
) AND
) INTERFERENCES
)
Linda R. Poteate
LINDA R. POTEATE)
Administrative Patent Judge)

TJO/yrt

Appeal No. 2003-04
Application No. 09/446,202

J.J. Camp
THE PROCTER & GAMBLE COMPANY
Sharon Woods Technical Center
11510 Reed Hartman Highway
Cincinnati, OH 45241